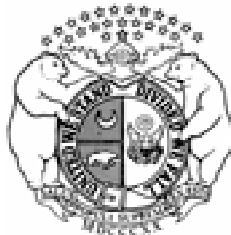


STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**  
MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0101958

Owner: Jefferson County Library District  
Address: 3021 High Ridge Boulevard, High Ridge, MO 63049

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Jefferson County Library Northwest Library  
Facility Address: 5678 State Road PP, High Ridge, MO 63049

Legal Description: SW ¼, NE ¼, NE ¼, Sec. 23, T43N, R4E; Jefferson County  
Latitude/Longitude: +3827162/ -09032116

Receiving Stream: Tributary to Bear Creek (U) (losing)  
First Classified Stream and ID: Bear Creek (P) (03421)  
USGS Basin & Sub-watershed No.: (07140104 - 080008)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

**FACILITY DESCRIPTION**

**Outfall #001 - Public Library - SIC # 4952**

Extended aeration/ sock filtration/ chlorination/ sludge disposal by contract hauler.

Design population equivalent is 150.

Design flow is 12,000 gallons per day.

Actual flow is 700 gallons per day.

Design sludge production is 3.2 dry tons per year.

Actual sludge production is < 1.0 dry tons per year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

A handwritten signature in cursive script that reads "Doyle Childers".

July 7, 2006      July 28, 2006  
Effective Date      Revised

Doyle Childers, Director, Department of Natural Resources  
Executive Secretary, Clean Water Commission

July 6, 2011  
Expiration Date

Mike Struckhoff, Director, St. Louis Regional Office

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 2 of 5	
					PERMIT NUMBER MO-0101958	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The Interim effluent limitations shall become effective upon issuance and remain in effect until November 28, 2009. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	Once/ Month	24 hr. estimate
Biochemical Oxygen Demand <sub>5</sub>	mg/L		15	10	Once/quarter ***	composite**
Total Suspended Solids	mg/L		20	15	Once/quarter ***	composite**
pH – Units	SU	****		****	Once/ quarter ***	grab
Ammonia as N	mg/L	*		*	Once/ quarter ***	grab
Temp	°C	*		*	Once/quarter ***	grab
Fecal Coliform (Note 1)	#/100mL	1000		400	Once/quarter	grab
Total Residual Chlorine (Note 2)	mg/L	1.0		1.0	Once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>January 28, 2007</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I &amp; III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)**

- \* Monitoring requirement only. Measure monthly and report quarterly.
- \*\* A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample.
- \*\*\* Sample once per Quarter during the months of January, April, July and October.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 – This facility must disinfect on year around basis.

Note 2– This permit contains a Total Residual Chlorine (TRC) limit.

- (a) Disinfection is required year-round unless the permit specifically states that “Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.” If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- (b) Do not chemically dechlorinate if it is not needed to meet the limits in your permit.
- (c) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 mg/L” TRC.

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 3 of 5	
					PERMIT NUMBER MO-0101958	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective November 29, 2009 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
(OUTFALL NUMBER AND EFFLUENT PARAMETERS)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	Once/quarter***	24 hour est.
Biochemical Oxygen Demand <sub>5</sub>	mg/L		15	10	Once/quarter***	composite**
Total Suspended Solids	mg/L		20	15	Once/quarter***	composite**
pH – Units	SU	****		****	Once/quarter***	grab
Ammonia as N	mg/L	*		*	Once/quarter***	grab
Temp	°C	*		*	Once/ quarter***	grab
Fecal Coliform (Note 3)	#/100 mL	1000		400	Once/quarter	grab
Total Residual Chlorine (Note 4)	mg/L	0.019 (.13ML)		0.01 (.13 ML)	Once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>April 28, 2010</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I &amp; III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)**

- \* Monitoring requirement only.
- \*\* A composite sample made up from a minimum of four grab samples collected within a 24- hour period with a minimum of two hours between each grab sample.
- \*\*\* Sample once per Quarter during the months of January, April, July and October.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0 to 9.0 pH units.

Note 3 – This facility must disinfect on year around basis.

Note 4 - This permit contains a Total Residual Chlorine (TRC) limit.

- a. This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500-CL G. from Standard Methods for the Examination of Water and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- b. Disinfection is required year-round unless the permit specifically states that “Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.” If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - a. Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - b. Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - c. Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances.

The permittee shall notify the Director as soon as it knows or has reason to believe:

  - a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
    - (4) The level established in Part A of the permit by the Director.
  - b. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
  - c. That the effluent limit established in part A of the permit will be exceeded.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Water Quality Standards.
  - a. Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
  - b. General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
    - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
    - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
    - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
    - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
    - (5) There shall be no significant human health hazard from incidental contact with the water;
    - (6) There shall be no acute toxicity to livestock or wildlife watering;
    - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
    - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

C. SPECIAL CONDITIONS ( continued)

7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
  - a. Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
  - b. If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

D. SCHEDULE OF COMPLIANCE

The final daily maximum and monthly average Total Residual Chlorine (TRC) limits of 0.019 mg/L and 0.010 mg/L, respectively, shall become effective **November 29, 2009** unless items 2 or 3 below are approved by the Department. The Effluent Regulation, 10 CSR 20-7.015(9)(H) allows the permittee to:

1. Install dechlorination facilities (**this option requires a construction permit from the Department of Natural Resources**), or
2. Present an evaluation to show that dechlorination is not required to protect one or both recreational uses, or;
3. Present a Use Attainability Analysis (UAA) that demonstrates one or both designated recreational uses are not attainable in the classified waters receiving the effluent.

Date of Fact Sheet: April 18, 2006

Date of Public Notice:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0101958

FACILITY NAME: Jefferson County Library Northwest Library

OWNER NAME: Jefferson County Library District

LOCATION: SW¼, NE¼, NE¼, Sec 23, T43N, R4E; Jefferson County:

RECEIVING STREAM: Tributary to Bear Creek

FACILITY CONTACT PERSON: Mel Pfeffer

TELEPHONE: (636) 343 - 8636

FACILITY DESCRIPTION AND RATIONALE

This facility provides secondary treatment to the wastewater discharge with extended aeration, sock filtration and a chlorination unit. Sludge is removed by a contract hauler. The discharge is to a tributary to Bear Creek, an unclassified stream, and is 1.9 miles from a "losing stream" segment and 3.3 miles from Bear Creek, the first classified (P) stream. Standard technology- based limits for a "losing stream" as shown in 10 CSR 20-7.015 (4) for BOD<sub>5</sub>, TSS, pH and fecal coli form, and 10 CSR 20-7.031 Table A for total residual chlorine (TRC) are believed adequate to protect the receiving stream. Ammonia and temperature have been added as monitoring requirements to determine if there is "reasonable potential" to violate state water quality standards for those parameters. The permit should contain a reopener clause should the data generated by this permit, or other monitoring data, indicate that state water quality standards are being exceeded, due at least in part to this discharge.

This permit will be issued for a period of five years.

Jefferson County Library No.  
Branch  
SW 1/4, NE 1/4, NE 1/4, Sec 2  
R4E, Jefferson County  
LAT 3827162  
LONG -9032116

St. Martins Ch.

Tributary to Bear Creek  
Bear Creek (P)(3421)

07140104-080008